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1987

Nebraska Summary: S040 Case-IH 9110

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SUMMARY OF OECD TEST 1125—NEBRASKA SUMMARY 040

CASE INTERNATIONAL 9110 DIESEL

ALSO STEIGER PUMA 1000 DIESEL

12 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Fuel Consumption			Mean Atmospheric Conditions
		Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—1000 rpm)					
168.4 (125.6)	2099	9.8 (37.0)	0.416 (0.253)	17.22 (3.39)	

VARYING POWER AND FUEL CONSUMPTION

168.4 (125.6)	2099	9.8 (37.0)	0.416 (0.253)	17.22 (3.39)	Air Temperature
146.2 (109.0)	2146	8.8 (33.3)	0.432 (0.263)	16.59 (3.27)	
111.2 (82.9)	2173	7.2 (27.2)	0.464 (0.282)	15.46 (3.05)	Relative humidity.
75.0 (55.9)	2200	5.7 (21.6)	0.546 (0.332)	13.13 (2.59)	
38.0 (28.3)	2224	4.2 (16.0)	0.801 (0.487)	8.95 (1.76)	Barometer
2.7 (2.0)	2266	3.0 (11.2)	7.962 (4.841)	0.90 (0.18)	

Maximum Torque 554.4 lb. ft (751.6 Nm) @ 1400 RPM

Maximum Torque Rise 32%

DRAWBAR PERFORMANCE

Power Hp (kW)	Drawbar pull (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp.°F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
75% of Pull at Maximum Power—Five Hours 7th Gear									
118.05 (88.07)	6820 (30.32)	6.50 (10.46)	2140	1.92	0.498 (0.303)	14.57 (2.87)	185 (85)	82 (28)	30.50 (103.0)

MAXIMUM POWER IN SELECTED GEARS

2nd Gear									
136.04 (101.48)	24210 (107.69)	2.11 (3.39)	2114	14.48	0.509 (0.309)	14.26 (2.81)	185 (85)	75 (24)	30.50 (103.0)
3rd Gear									
145.28 (108.38)	20420 (90.82)	2.67 (4.30)	2051	8.50	0.474 (0.288)	15.33 (3.02)	185 (85)	79 (26)	30.50 (103.0)
4th Gear									
147.72 (110.20)	16560 (73.65)	3.35 (5.39)	2051	7.02	0.466 (0.283)	15.58 (3.07)	183 (84)	82 (28)	30.50 (103.0)
5th Gear									
147.80 (110.26)	13670 (60.81)	4.06 (6.53)	2051	4.41	0.470 (0.286)	15.43 (3.04)	185 (85)	81 (27)	30.50 (103.0)
6th Gear									
149.16 (111.27)	10890 (48.43)	5.14 (8.27)	2051	3.66	0.456 (0.277)	15.94 (3.14)	185 (85)	84 (29)	30.50 (103.0)
7th Gear									
149.21 (111.31)	9070 (40.34)	6.17 (9.93)	2050	2.56	0.441 (0.268)	16.45 (3.24)	183 (84)	84 (29)	30.50 (103.0)
8th Gear									
147.48 (110.02)	7440 (33.08)	7.44 (11.97)	2052	2.24	0.438 (0.266)	16.55 (3.26)	187 (86)	84 (29)	30.50 (103.0)
9th Gear									
143.60 (107.12)	5910 (26.30)	9.11 (14.66)	2048	0.85	0.450 (0.274)	16.09 (3.17)	185 (85)	81 (27)	30.50 (103.0)

Location of Test: J.I. Case Company, 3101 1st Avenue North, Fargo, North Dakota 58102

Dates of Test: April to July, 1987

Manufacturer: J.I. Case Company, 700 State Street, Racine, Wisconsin 53404 U.S.A.

FUEL AND OIL: Fuel No. 2 Diesel Cetane No. 40 min Specific gravity converted to 60°/60°F (15°/15°C) 0.859 Fuel weight 7.15 lbs/gal (0.857 kg/l) Oil SAE 15W40 Oil Consumption for 10 hours 1.45 lb (660 gm) Transmission lubricant Case IH transmission oil 02-7408T1 Final drive lubricant SAE 80W-90 gear oil API GL-5

ENGINE: Make Consolidated Diesel Company Diesel Type six cylinder vertical with turbocharger Serial No. 44191697 Crankshaft lengthwise Rated engine speed 2100 Bore and stroke 4.49" × 5.32" (114 mm × 135 mm) Compression ratio 17.3 to 1 Displacement 504.5 cu in (8269 ml) Starting system 12 volt Lubrication pressure Air cleaner two paper elements and aspirator Oil filter one full flow cartridge Oil cooler engine coolant heat exchanger for crankcase oil, radiator for hydraulic and transmission oil Fuel filter two paper cartridges Muffler none Exhaust vertical Cooling medium temperature control two thermostats.

CHASSIS: Type four wheel drive Serial No. 17900793 Tread width rear 60" (1524 mm) to 130" (3302 mm) front 60" (1524 mm) to 130" (3302 mm) Wheel base 120.4" (3058 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio with full range operator controlled powershift Nominal travel speeds mph (km/h) first 1.9 (3.1) second 2.3 (3.7) third 2.9 (4.7) fourth 3.5 (5.6) fifth 4.2 (6.7) sixth 5.1 (8.2) seventh 6.2 (9.9) eighth 7.4 (11.9) ninth 9.1 (14.6) tenth 11.2 (18.0) eleventh 13.4 (21.5) twelfth 16.5 (26.5) reverse 2.5 (4.0), 4.6 (7.4) Clutch multiple wet disc hydraulically power actuated by foot pedal Brakes caliper disc hydraulically operated by foot pedal Steering hydrostatic and articulated Power take-off 1000 rpm at 2099 engine rpm Unladen tractor mass 20160 lb (9140 kg).

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

TRACTOR SOUND LEVEL WITH CAB		dB(A)
Maximum sound level—in 5th gear		80.0
Bystander in 12th gear		94.0

CENTER OF GRAVITY

Horizontal distance forward from centerline of rear wheels	62.3" in (1582 mm)
Vertical distance above roadway	45.6" in (1158 mm)
Horizontal distance from center of rear wheel tread 0" (0 mm) to the right/left	

TURNING ON A CONCRETE SURFACE

Turning radius—with singles right 206" (5.24 m) left 200" (5.10 m)	
—with duals right 236" (5.99 m) left 231" (5.86 m)	
Turning space radius—with singles right 236" (6.00 m) left 230" (5.85 m)	
—with duals right 247" (6.28 m) left 242" (6.15 m)	

TIRES, BALLAST AND WEIGHT		With Ballast	Without Ballast
Rear Tires	—No., size, ply & psi (kPa)	Four 18.4-38; 8; inner	Two 18.4-38; 8; 18 (124)
	Ballast	14 (96) outer 12 (82)	
	—Duals (total)	550 lb (249 kg)	None
Front Tires	—No., size, ply & psi (kPa)	Four 18.4-38; 8; inner	Two 18.4-38; 8; 18 (124)
	Ballast	14 (96) outer 12 (82)	
	—Liquid (total)	2460 lb (1116 kg)	None
	—Duals (total)	550 lb (249 kg)	None
Height of Drawbar		15.7 in (398 mm)	14.8 in (375 mm)
Static Weight	—Rear	10280 lb (4660 kg)	9730 lb (4410 kg)
	—Front	13440 lb (6100 kg)	10430 lb (4730 kg)
	—Total	23720 lb (10760 kg)	20160 lb (9140 kg)

THREE POINT HITCH PERFORMANCE (STATIC TEST)

CATEGORY: III

Quick Attach: None

Maximum Force Exerted Through Whole Range: 11230 lbs (50.0 kN)

i) Opening pressure of relief valve: NA

Sustained pressure at compensator cutoff: 2540 psi (175 Bar)

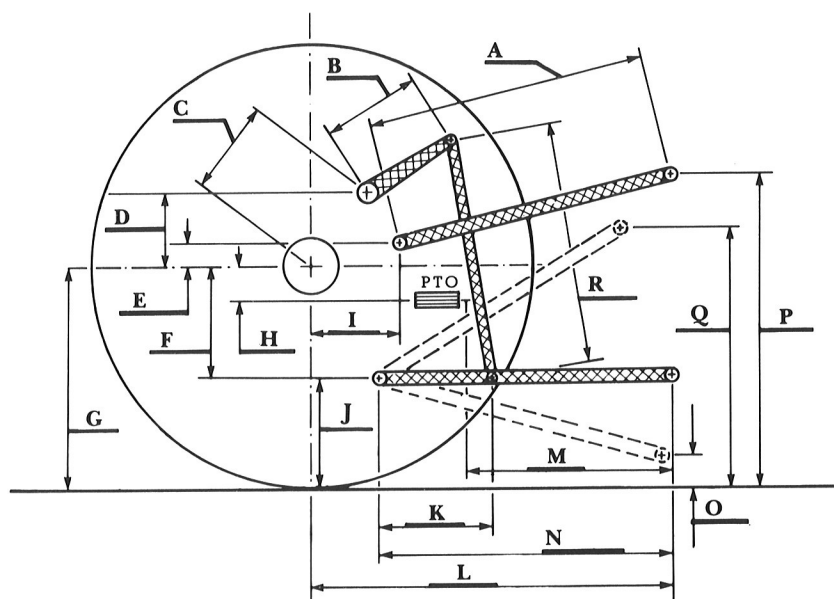
ii) Pump delivery rate at minimum pressure and rated engine speed: 28.3 GPM (107.1 l/min)

iii) Pump delivery rate at maximum hydraulic power: 25.0 GPM (94.6 l/min)

Delivery pressure: 2030 psi (140 Bar)

Power: 29.6 Hp (22.1 kW)

HITCH DIMENSIONS AS TESTED—NO LOAD



REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. The Case International 9110 is identical to the Steiger Puma 1000 except with regard to color and model designation.

The performance figures on this summary were taken from a test conducted under the OECD standard test code procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. 1125, Nebraska Summary 040, May 17, 1988.

LOUIS I. LEVITICUS

Engineer-in-Charge

K. VON BARGEN

R. D. GRISSE

J. R. GILLEY

Board of Tractor Test Engineers

	inch	mm
A	30.0	762
B	21.0	533
C	25.7	654
D	25.1	638
E	7.4	187
F	9.9	251
G	32.3	820
H	2.5	63
I	22.3	566
J	22.4	569
K	23.0	584
L	52.7	1338
M	25.7	652
N	42.0	1067
O	8.5	216
P	44.4	1129
Q	40.7	1033
R	35.5	902